

ABSTRACT**METHOD FOR ASSISTING LOW-ALTITUDE NAVIGATION OF AN AIRCRAFT**

The invention relates to a method for assisting low-altitude navigation of an aircraft equipped with a system suited to determining a flight-plan ground trajectory based on intermediate points P at an altitude $\text{alt}(P)$, and the aircraft's performance. It comprises the following steps:

- for each point P , calculating a safe altitude, alt safe , to obtain a point P_{safe} ,
- calculating a safe profile formed from segments joining the points P_{safe} ,
- extracting summits S from among the points P_{safe} ,
- determining the aircraft's weight at these points S as a function of the distance between the aircraft and S and of its consumption over this distance, where the consumption is one aspect of its performance,
- for each point S , determining the maximum climb slope MaxClimbFPA and the maximum descent slope MaxDescFPA as a function of the performance and the weight, defining two performance segments which have slopes MaxClimbFPA and MaxDescFPA on either side of the point S and
- calculating a performance profile formed from performance segments and which makes it possible to associate at each point P of the safe profile a performance altitude, $\text{alt perf}(P)$.

No figure